

Shiv Patel

+1 (647) 294-0235 [✉ pates302@mcmaster.ca](mailto:pates302@mcmaster.ca) [in LinkedIn](#) [Github](#)

Education

McMaster University

Hamilton, Ontario

Bachelor of Engineering (B.Eng), Software Engineering Co-Op

Sept. 2023 - Apr. 2028 (Expected)

- Relevant Courses: Design Projects in Engineering, Elementary Linear Algebra, Artificial Intelligence - Innovative Technologies
- Clubs & Teams: MacEng Ambassador & Tour Guide, DeltaHacks X (Participant), McMaster Gujarati Students Association (**VP Finance**, McMaster Intramural League (**Game Day Official**))
- Awards: Engineering Dean of Excellence Award (**\$7500**), McMaster University Award of Excellence (**\$3000**)

Technical Skills

Languages: Python, HTML/CSS, JavaScript, MATLAB, LaTeX

Technologies: React.js

Tools: Figma, GitHub, VS Code, Microsoft Office (Excel, Teams, Outlook), AnsysGranta, AutoCAD

Libraries: NumPy

Certifications/Training: WHMIS Trained, First Aid & CPR/AED (Level C)

Projects

Personal Website

May 2024 – June 2024

HTML, CSS, JavaScript

Personal Project

- Built a personal portfolio site with **HTML, CSS, and JavaScript**, ensuring mobile-friendly, responsive design.
- Used **JavaScript** for dynamic content, interactive elements, and smooth transitions, including project gallery and contact form.
- Applied best practices for faster load times and better SEO, using efficient coding, image optimization, and meta tags.
- Created custom **CSS** animations and transitions to enhance the visual appeal and user interaction, making the website more engaging and aesthetically pleasing.

Lurnius

Jan. 2024

Python, React, SQL, TypeScript, Next.js, Node.js, Express.js, Figma

Hackathon Project

- **Collaborated with Yax Patel, Peter Yang, and Sharvin Soosaipillai**
- Designed a **responsive frontend using Next.js, React, and TypeScript**, optimized through **Figma prototypes**, to facilitate community engagement with an intuitive interface for voting and commenting on resources.
- Leveraged **Cohere's large language models** to automate the curation and classification of educational resources, enhancing personalized content delivery on a web-based interface.
- Developed a **scalable backend with Node.js, Express, and TypeScript**, integrating **PlanetScale's MySQL-compatible database** for efficient data management and user interaction.
- Integrated **Google YouTube and Books APIs** along with the **Open Educational Resources (OER) API** to dynamically source a diverse range of learning materials, maintaining content relevance and freshness.

System For Sorting and Recycling Containers

Jan. 2024 – Feb. 2024

Python, Quanser Technology

Academic Project

- Developed a System for Sorting and Recycling Containers using **Python and Quanser Technology**.
- Designed **algorithms** to identify and sort containers based on predefined criteria.
- Integrated Quanser Technology for precise control of **robotic arms and sensors**.
- Collaborated with a multidisciplinary team to deliver an efficient waste management solution.
- **Collaborated with a modeling sub-team** to incorporate their proposed gear mechanism for enhancing container sorting and recycling efficiency.

Work Experience

McMaster University Housing & Conference Services

April 2024 - Present

Residence Life Staff - Living Learning Community (LLC) Community Advisor

Hybrid

- Develop interactive activities to promote personal dignity and mutual respect within the assigned community area.
- Ensure the physical, mental, and social safety of all participants, promptly reporting any issues to supervisors.
- Maintain confidentiality while liaising with internal stakeholders on student services matters.
- Conduct regular rounds of residence buildings, promoting staff engagement and community standards through the coordination of initiatives and events.

Toronto District School Board (TDSB)

Mar. 2022 – June 2022

Math Tutor

Hybrid

- Implement personalized tutoring sessions tailored to each student's needs, covering topics from grade 9 to grade 12 Ontario curriculum.
- Utilize hybrid teaching methods incorporating both online resources and in-person sessions to maximize learning outcomes and accommodate diverse learning styles.
- Track student progress through regular assessments and evaluations, aiming for a **minimum grade increase of 10% on tests** and a **cumulative course grade increase of at least 15%** over the tutoring period.
- Provide additional support and resources to strengthen fundamental math skills, ensuring students develop a solid foundation for more advanced topics.